US009995780B2

(12) **United States Patent**
Brooks et al.

(10) **Patent No.: US 9,995,780 B2**
(45) **Date of Patent: Jun. 12, 2018**

(54) **TRAILER LIGHTING OUTAGE DETECTION CIRCUIT**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 87 days.

(21) Appl. No.: **14/882,779**

(22) Filed: **Oct. 14, 2015**

(65) **Prior Publication Data**

US 2017/0109997 A1 Apr. 20, 2017

(51) **Int. Cl.**

G08B 21/18	(2006.01)
G01R 31/00	(2006.01)
B60Q 11/00	(2006.01)
H05B 33/08	(2006.01)
G01R 31/44	(2006.01)
B60Q 1/30	(2006.01)

(52) **U.S. Cl.**

CPC ***G01R 31/006*** (2013.01); ***B60Q 1/305*** (2013.01); ***B60Q 11/005*** (2013.01); ***G01R 31/44*** (2013.01); ***H05B 33/0893*** (2013.01); *B60Q 2900/10* (2013.01)

(58) **Field of Classification Search**

CPC G08B 21/185; B60Q 11/005; G01R 31/44

See application file for complete search history.

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(57) **ABSTRACT**

A vehicle LED lighting outage detection circuit is disclosed for detecting a fault in the LED light and automatically increasing the power drawn from the light power supply in response to the fault. A complementary detection circuit is also disclosed for detecting the increased power draw and signaling a fault to an operator. The increased power draw can be selected to be in the form of a pulse that settles to a lower power draw state after a time to avoid excessive and wasteful power draw. The system can be mounted in a vehicle and, more particularly, to a semi-tractor truck, or installed as a retrofit system into an existing semi-trailer system.

11 Claims, 10 Drawing Sheets